Executive Summary
Interim Capital Improvement Program Overview

Purpose

The El Dorado County Community Development Agency (CDA) engages in a number of activities to assess and plan for the short and long term needs of the community. The Capital Improvement Program (CIP) represents the CDA's strategy for infrastructure development and maintenance. The CIP is a planning document that identifies capital projects and provides a schedule and funding options. It provides a means for the El Dorado County Board of Supervisors (Board) to determine capital priorities.

Key criteria used for project consideration and prioritization include: health and safety, project costs and funding, community support, consistency with the General Plan, and ongoing maintenance costs. Potential new projects are reviewed by CDA staff and presented to the Board for discussion and inclusion in the CIP. The CIP is a planning tool that the CDA updates annually as new information becomes available regarding priorities, funding sources, project cost estimates and timing.

The CDA's goals for the CIP are to:

- Maintain and upgrade existing infrastructure to support existing residences and businesses.
- Develop new capital projects to help meet the highest priority community growth needs.
- Align capital budgets with adopted policies and plans.
- Link the County's development and fiscal planning processes.
- Broaden public participation in the budget process by providing documentation and scheduling hearings early in the process.
- Increase coordination between internal departments and public agencies.

CIP Overview

The CIP serves as a planning and implementation tool for the development, construction, rehabilitation and maintenance of the County's infrastructure. Capital improvements are projects that provide tangible long-term improvements or additions of a fixed or permanent nature, have value and can be depreciated. The CIP process includes identifying, prioritizing and developing funding for needed projects. The CIP includes ongoing projects started in previous years and new projects starting in the current and future fiscal years.

The CIP is constrained by limited available funding sources that have specific restrictions on how they can be used. Currently, the County's infrastructure needs in the twenty-year time frame exceed available resources, which results in competing priorities for limited funds. In order to resolve this issue, the CDA uses outside funding sources (Federal, State and other grants) whenever possible, in addition to County funds (e.g., Traffic Impact Mitigation (TIM) Fees, General Fund).

The CIP makes up over 40% of the total CDA budget, and over half of the Transportation Division's budget. The CDA coordinates the development of the capital budget with the

development of the operating budget, so that future operating costs are projected in alignment with the capital infrastructure.

Major Update to the West Slope CIP and Traffic Impact Mitigation Fee Program

In order to ensure that growth in the County, consistent with the General Plan, does not exceed available roadway capacity, the County is required to implement General Plan Policy TC-Xb and Implementation Measures TC-A and TC-B**.** This policy and measures require major updates to the CIP at least every five years, in coordination with the five-year major review of the General Plan. The five-year CIP update specifies expenditures for roadway improvements within a 20-Year horizon.

The CDA is currently processing a major 5-Year update to the West Slope CIP and Traffic Impact Mitigation (TIM) Fee program. Whereas the CIP is the planning, prioritization, scheduling and construction mechanism, the TIM Fee program is one of the funding mechanisms for getting needed CIP projects built within the County.

CDA staff expects to complete the major update in the fall of 2016. At that time, staff will produce a final 2016 CIP Book that incorporates the changes made to the CIP during the major update. The purpose of this Interim CIP is to provide a work plan for the Transportation Division until the major 5-Year update to the CIP and TIM Fee program is adopted.

CIP Format

The 2016 Interim CIP Book includes five capital programs:

- West Slope Road/Bridge (CIP)
- Tahoe Environmental Improvement Program (EIP)
- Airport Capital Improvement Program (AICP)
- Transportation Facilities Improvement Program (TFIP)
- Capital Overlay and Rehabilitation Program (CORP)

The CDA maintains an interactive map depicting the location of projects in each capital program, located at http://gem.edcgov.us/cip/.

CIP Annual Updating Process

All Transportation programs are reviewed and updated annually, including revenue estimates, project scopes, costs and schedules. Proposed changes to the CIP will be finalized upon Board adoption in June. The CIP current work plan is developed concurrently with the CDA budget for the upcoming fiscal year. The CIP/Budget cycle is shown in Figure 1-1.

Figure 1-1: Typical CIP/Budget Cycle

The Airport CIP and the Tahoe EIP have additional review requirements, primarily tied to their specific funding sources. The Airport CIP is tied directly to the FAA's (Federal Aviation Administration) annual grant cycle and the Tahoe EIP is tied directly to TRPA's (Tahoe Regional Planning Agency) annual planning cycle.

The following tables list projects in the Current Year work plan:

- Table 1-1: projects currently in construction or scheduled to begin in FY 2016/17.
- Table 1-2: projects scheduled to be in planning, design, right of way or environmental monitoring phases in FY 2016/17.

Table 1-1: Projects Currently In Construction or Scheduled to Begin in FY 2016/17

Project Type	Project Description		Total Cost ($M)[1]
West Slope Road/Bridge	#77123	Alder Drive at EID Canal – Bridge Replacement	1.59
	#77119	Blair Road at EID Canal – Bridge Replacement	1.38
	#73360	Cold Springs Road Realignment	1.93
	#72375	Diamond Springs Parkway – Phase 1A – SR49 Realignment	10.29
	#97012	El Dorado Trail – Los Trampas to Halcon	1.15
	#77114	Green Valley Road at Weber Creek – Bridge Replacement	11.62

[1] Costs are estimated, and rounded to the nearest hundredth of $1 million.

Table 1-1: Projects Currently in Construction or Scheduled to Begin in FY 2016/17 (Cont.)

Project Type	Project Description		Total Cost ($M)[1]
West Slope Road/Bridge	#72369	Hollow Oak Road Drainage	0.85
	#77131	Ice House Road at Jones Fork Silver Creek Bridge Maintenance Project	0.76
	#72308	New York Creek Trail East – Phase 2	1.45
	#73362	Salmon Falls Road South of Glenesk Lane Realignment	1.77
	#72310	Silva Valley Parkway Class 1 and Class 2 Bike Lanes (Harvard to Green Valley Road)	1.84
	#72141	Silva Valley Parkway/Serrano Parkway Traffic Circulation Improvement	0.64
	#77124	Silver Fork at South Fork American River - Bridge - Replacement	2.35
	#77115	Sly Park Road at Clear Creek Crossing – Bridge Replacement	5.84
	#53124	U.S. 50 HOV Lanes Phase 0	17.77
	#71328	U.S. 50/Silva Valley Parkway Interchange – Phase 1	56.71
	#71359	U.S. 50/Missouri Flat Road Interchange – Phase 1B2	1.53
	#71346	U.S. 50/Missouri Flat Road Interchange 1C – Riparian Restoration	1.83
Tahoe EIP	#95157	CSA #5 Erosion Control Project	0.95
	#95179	Meyers Erosion Control Project	1.59
	#95172	Montgomery Estates Area 3 Erosion Control Project	0.55
	#95192	Sawmill 2B Bike Path and Erosion Control Project	2.87
CORP	#72190	Patterson Drive and Missouri Flat Road Overlay	1.25
TFIP	#81134	Headington Wash Rack Facility Project	1.30

Table 1-2: Projects in Planning, Design or Right of Way Phase in FY 2016/17

Project Type	Project Description		Total Cost ($M)[1]
West Slope Road/Bridge	#77128	Bassi Road at Granite Creek – Bridge Replacement	4.08
	#77116	Bucks Bar Road at the North Fork Cosumnes River – Bridge Replacement	7.94
	#77138	Clear Creek Road at Clear Creek (PM 1.82) – Bridge Replacement	4.41
	#77139	Clear Creek Road at Clear Creek (PM 0.25) – Bridge Replacement	4.47

Table 1-2: Projects in Planning, Design or Right of Way Phase in FY 2016/17 (Cont.)

Project Type	Project Description		Total Cost ($M)[1]
West Slope Road/Bridge	#72334	Diamond Springs Parkway – Phase 1B	32.36
	#97015	El Dorado Trail – Missouri Flat Road Bike/Pedestrian Overcrossing	2.80
	#97014	El Dorado Trail – Missouri Flat Road to El Dorado Road	4.15
	#77137	Greenstone Road at Slate Creek – Bridge Replacement	3.51
	#77127	Green Valley Road at Indian Creek – Bridge Replacement	4.52
	#77136	Green Valley Road at Mound Springs Creek – Bridge Replacement	4.50
	#77125	Hazel Valley Road at PG&E Canal – Bridge Replacement	2.62
	#77135	Hanks Exchange at Squaw Hollow Creek – Bridge Replacement	3.98
	#72191	Ice House Road Pavement Rehab, Ph. 2	9.67
	#77126	Mosquito Road Bridge at South Fork American River	30.58
	#77129	Mount Murphy Road at South Fork American River – Bridge Replacement	21.58
	#77122	Newtown Road at South Fork of Weber Creek– Bridge Replacement	5.61
	#77134	Oak Hill Road at Squaw Hollow Creek – Bridge Replacement	3.87
	#76108	Silver Springs Parkway to Bass Lake Road (south segment)	8.87
	#72361	U.S. 50/Cameron Park Drive Interchange Improvements	47.73
	#71319	U.S. 50/Camino Area Safety Project	4.14
	#71333	U.S. 50/Ponderosa Rd/So. Shingle Rd Interchange Improvements	16.36
Tahoe EIP	#73120	Apache Avenue/US 50 Intersection Signalization	12.81
	#95117	Class 1 Bike Path: East San Bernardino – West San Bernardino	1.46
	#95191	Country Club Heights Erosion Control Project	0.70
	#95708	Highway 89 Class 1 Trail	2.11
	#95177	Oflying Erosion Control Project	0.80
	#95168	South Upper Truckee I Erosion Control Project	0.60
Airports - Placerville	#93132	Airport Layout Plan Update and Obstruction Survey – Placerville	0.21
	#93130	Taxiway Edge Lights	0.47
Airports - Georgetown	#93527	Crack Seal, Joint Seal and Mark Runway	0.52
	#93503	Obstruction Survey	0.12

West Slope Road/Bridge
Interim Capital Improvement Program Overview

A Capital Improvement Program (CIP) is a planning document that identifies capital improvement projects (e.g. roads and bridges) a local government or public agency intends to build over a certain time horizon (usually between five and twenty years). CIPs typically provide key information for each project, including delivery schedule, cost and revenue sources. The County's CIP provides a means for the Board to determine capital improvement project and funding priorities over a 20-Year horizon.

In order to maintain the integrity of the County's roadway network, the County is required to implement General Plan Policy TC-Xb and Implementation Measures TC-A and TC-B. These measures require the development of a 10- and 20-Year CIP. These policies also require an update of the 20-Year growth forecast every five years.

The forecast is needed to update the CIP and Traffic Impact Mitigation Fee (TIM) Fee Program. Forecasting growth is an iterative and ongoing process – forecasts are reviewed and adjusted annually as well as every five years. Routinely verifying and updating growth forecasts allows the County to account for new information and adjust its assumptions and plans accordingly.

The 5-Year Major Update to the West Slope CIP and TIM Fee Program is in process. The study includes an updated baseline year of 2015 and an updated growth projection through 2035. Based on General Plan policies, this information is used to identify existing and future deficiencies in the transportation network and the types of transportation projects and costs that would be required to mitigate them. Figure 1-2 illustrates the 5-Year Major Update cycle.

Major 5-Year Update Cycle

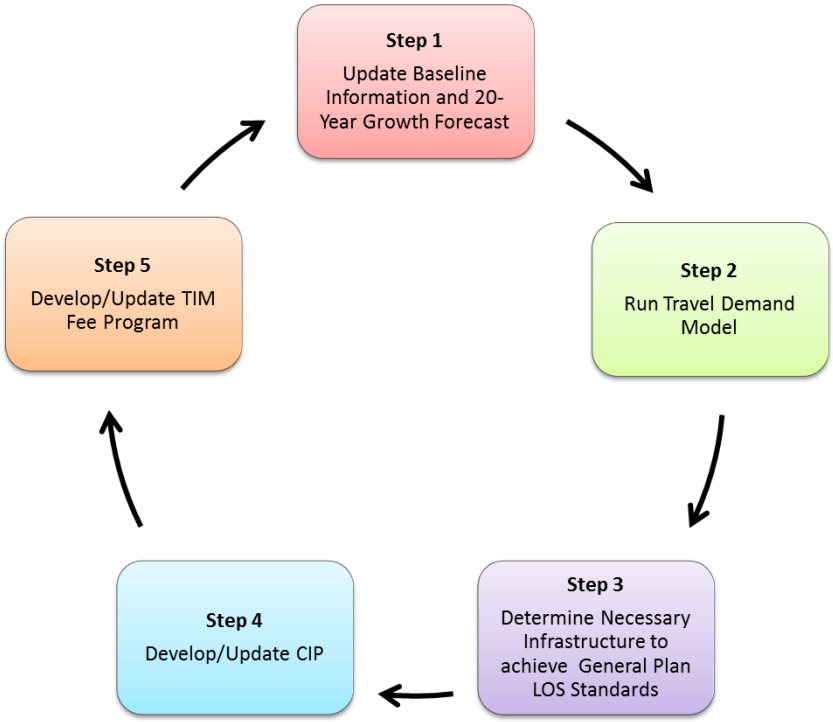
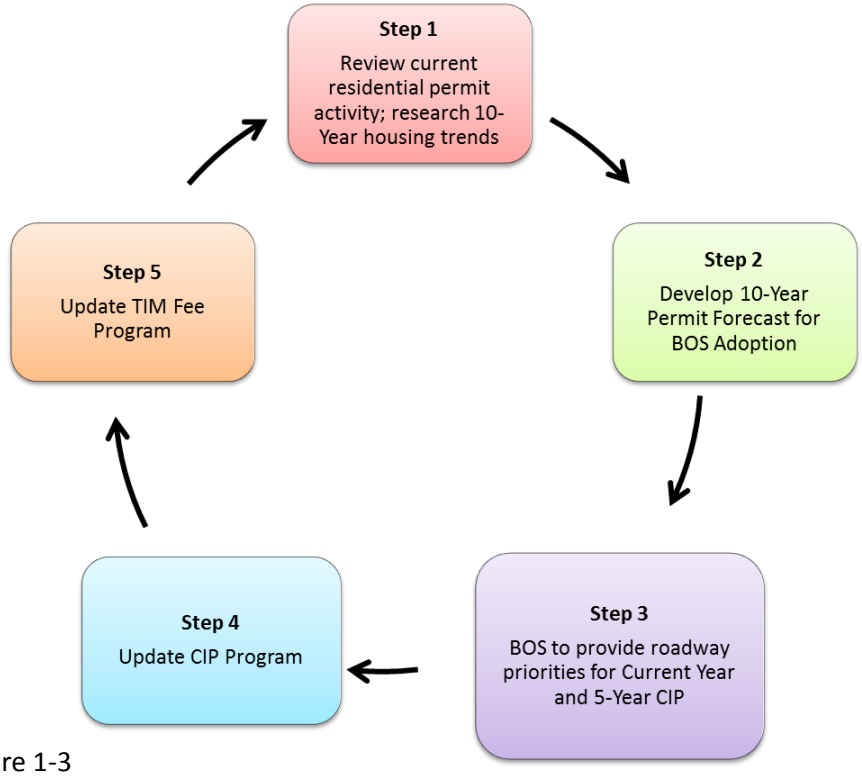


Figure 1-2

Figure 1-3 illustrates the annual CIP update cycle.

Annual CIP Cycle



Acronyms:
BOS: Board of Supervisors
CIP: Capital Improvement Program
LOS: Level of Service
TDM: Travel Demand Model

Figure 1-3

Project Prioritization

The CDA uses several criteria to prioritize road improvement projects including:

- **Estimated Construction Start**
  - The first fiscal year the project is planned to be in construction.
  - Projects estimated to start construction in fiscal year (FY) 2016/17 or 2017/18 are more desirable.
- **Supports Economic Development in the County of El Dorado**
  - Projects that would help create connections to pave the way for new commercial development are more desirable.
  - For projects with proposed scopes that don't include construction, the CDA denotes that these projects will support economic development once constructed.
- **Safety Ranking**
  - Projects are rated High, Medium, or Low based on the likelihood that they would improve safety conditions once constructed (High = higher likelihood of the proposed project improving safety).
  - For projects with proposed scopes that don't include construction, the CDA estimates the safety rating once the project is constructed.
  - Projects with Medium or High rankings are more desirable.

- **Capacity/Traffic Relief**
  - Average Daily Trip (ADT) traffic counts are reviewed for existing roads to provide a relative sense of how heavily they are used.
  - For proposed new roads, projected ADTs are provided from recent traffic studies.
  - Projects on roads with ADTs around 10,000 or higher are more desirable.
- **Funding/Grant Leveraging**
  - Projects are ranked High, Medium, or Low based on their ability to attract grant funding (High = higher likelihood of attracting grant funding).
  - Projects with Medium or High rankings are more desirable
- **Caltrans Sufficiency Rating (applicable to Bridge projects)**
  - Caltrans' bridge sufficiency ratings are based on a scale of 1-100: bridges with scores between 0 and 50 are eligible for replacement; bridges with scores between 51 and 80 are eligible for rehabilitation; and bridges with scores between 81 and 100 are eligible for maintenance.
  - Bridge projects eligible for rehabilitation or replacement are a higher priority.

In addition to prioritizing projects in or near construction, the CDA prioritizes projects the Board has previously expressed an interest in moving forward. The CDA has continued to pursue potential Federal grants for rural bridge rehabilitation or replacement, which require little or no matching funds. This effort facilitates delivering these bridge projects now, avoiding the need for maintenance or replacement at a future date when grant funding may no longer be available.

Twenty-Year CIP Total Expenditures

The CDA's projected expenditures for the West Slope Road/Bridge Twenty-Year CIP are approximately $922,000,000, which includes funding from all sources. CIP Revenue sources as of FY 2015/16 are displayed in Figure 1-4.

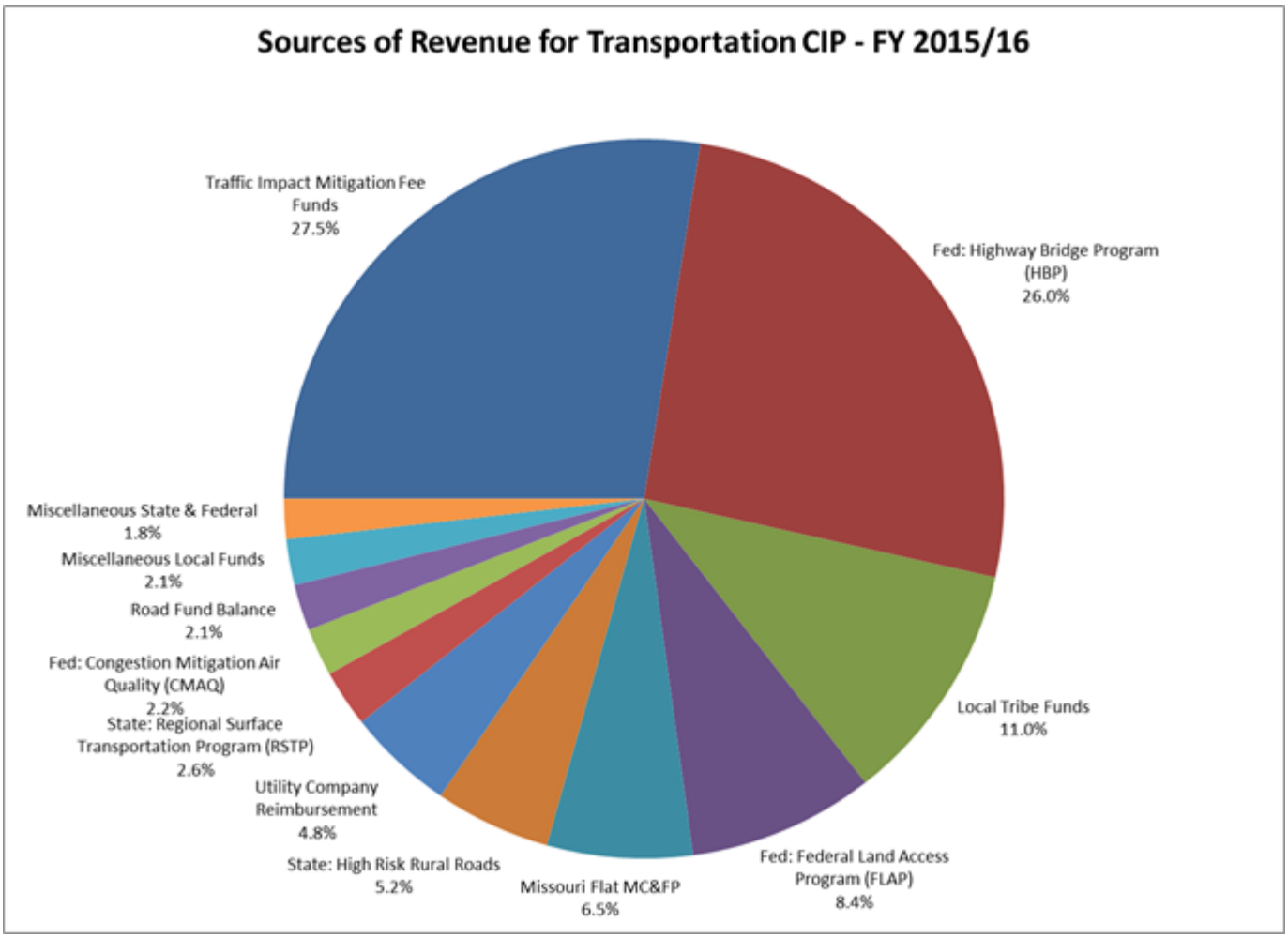


Figure 1-4

CIP Book Format

Indexes

Indexes in Section 2 provide alternate ways to locate detailed project summaries – alphabetically, by project number and by Supervisor district.

In addition, the CDA maintains an interactive map depicting the location of projects in the West Slope Road/Bridge CIP, located at http://gem.edcgov.us/cip/.

Cash Proformas

Section 3 includes cash proformas for the TIM Fee Program, Local Funds – Tribe, the Missouri Flat Corridor Master Circulation and Funding Program, and Regional Surface Transportation Program (RSTP) Match and Exchange Funds. The cash proformas show how funding source revenues are used and what is left in each fund at the end of each year. Pending and approved reimbursements are also noted in this section, as well as a description of revenue sources and their potential uses.

Individual Projects

Individual Project Summaries are provided in Section 4 for each project in the CIP, in alphabetical order. The summaries provide detailed descriptions, location maps, schedule, cost and revenue information. The "Revenues" section of each project summary lists the various funding sources for each project, including TIM Fee funds, State and Federal grants, developer advances, etc. The "Expenditures" section of each project summary includes the various types of costs planned to be incurred for each project (i.e., Planning/Environmental, Design, Right of Way, Construction and Environmental Monitoring.)

The "Project Schedule" section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for "Planning/Env – Staff" and "Planning/Env – Consultant". Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. "Planning/Env – Staff" refers to the cost for CDA staff time, while "Planning/Env – Consultant" includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

2. **Design:** This phase includes expenditures for "Design – Staff" and "Design – Consultant". The Design phase includes all costs related to developing the project plans, specifications and engineer's cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. "Design – Staff" refers to the cost for CDA staff time, while "Design – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

3. **Right of Way:** This phase includes expenditures for "Right of Way – Staff", "Right of Way – Acquisition", and "Right of Way – Consultant". The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. "Right of Way – Staff" refers to the cost for CDA staff time; "Right of Way – Acquisition" refers to the cost of land; and "Right of Way – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

4. **Construction:** This phase includes expenditures for "Construction Mgmt – Staff", "Construction Mgmt – Consultant" and "Direct Construction Costs". This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. "Construction Mgmt – Staff" refers to the cost for Division staff time, while "Construction Mgmt – Consultant" includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) "Direct Construction Costs" refers to the actual cost to build the project.

5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for “Env Monitoring – Staff” and “Env Monitoring – Consultant”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date either coincides with the date of the project engineer's initial estimate or the date of Board adoption of 2004 General Plan TIM Fee Program Resolution 266-2006.

The Lake Tahoe Basin has long been at the forefront of environmental improvements at Federal, State and Local levels. The Community Development Agency (CDA), Transportation Division's Tahoe Engineering Unit (TEU) is solely grant funded, and is primarily responsible for capital projects identified in the Tahoe Environmental Improvement Program (EIP) to improve the environmental quality of Lake Tahoe. Projects are aimed at implementing improvements in the Lake Tahoe watershed, airshed and the lake itself. The TEU's projects address the EIP threshold categories of Water Quality, Soil Conservation/Stream Environment Zone, Air Quality/Transportation, Fisheries and Recreation. These environmental threshold carrying capacities are defined as environmental standards necessary to maintain significant scenic, recreational, educational, scientific or natural values of the Lake Tahoe Region, or to maintain public health and safety within the region.

As tourism and summer outdoor recreation become more important in the Lake Tahoe Basin, more bike trail projects are appearing in the Tahoe EIP. The TEU's Five-Year EIP includes construction of one to two projects per construction season. The construction season in Tahoe is limited to May 1 through October 15, per regulatory ordinances. Since the TEU's environmental improvement projects are dependent on grant funds, the projects included in this EIP represent the TEU's best project delivery forecast at this time.

Tahoe EIP Annual Updating Process

The EIP program is reviewed and updated annually, including revenue estimates and project costs and schedules. The EIP is developed concurrently with the CDA's budget for the upcoming fiscal year. Figure 1-5 illustrates the annual EIP update cycle.

In the case of the EIP, the needs of granting agencies are reviewed during July through November, and project costs and anticipated revenues are updated. TEU staff identifies the needs of granting agencies, updates the Federal/State/Local grant forecast and revises projects in the Tahoe EIP based on latest cost and grant information. This list is then submitted to the Tahoe Regional Planning Agency (TRPA) for review in December. Project costs, funding sources and delivery priorities are reviewed, updated and presented to the Board of Supervisors (Board) for discussion and adoption in February.

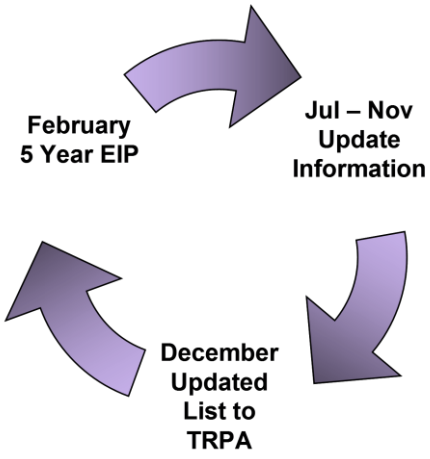


Figure 1-5: Tahoe EIP Annual Updating Process

The CDA maintains an interactive map depicting the location of projects in the Tahoe EIP, located at http://gem.edcgov.us/cip/.

Individual Projects - Grouped by Project Type

Individual project summaries are located in Section 4.2, and provide detailed descriptions, schedule, cost and revenue information. Projects are listed in alphabetical order within this section. The "Revenues" section of each project summary lists the various funding sources for each project, and can include many different grants, including California Tahoe Conservancy (CTC), TRPA, U.S. Forest Service (USFS), etc. The "Expenditures" section of each project summary includes the various types of costs expected for each project (i.e., Planning/ Environmental, Design, Right of Way, Construction and Environmental Monitoring).

The "Project Schedule" provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for "Planning/Env – Staff" and "Planning/Env – Consultant". Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. "Planning/Env – Staff" refers to the cost for CDA staff time, while "Planning/Env – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

2. **Design:** This phase includes expenditures for "Design – Staff" and "Design – Consultant". The Design phase includes all costs related to developing the project plans, specifications and engineer's cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. "Design – Staff" refers to the cost for CDA staff time, while "Design – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

3. **Right of Way:** This phase includes expenditures for "Right of Way – Staff", "Right of Way – Acquisition", and "Right of Way – Consultant". The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. "Right of Way – Staff" refers to the cost for CDA staff time; "Right of Way – Acquisition" refers to the cost of land; and "Right of Way – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

4. **Construction:** This phase includes expenditures for "Construction Mgmt – Staff", "Construction Mgmt – Consultant" and "Direct Construction Costs". This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. "Construction Mgmt – Staff" refers to the cost for Division staff time, while "Construction Mgmt – Consultant" includes all other labor costs (e.g., staff time from

non- CDA departments, external consultants, etc.) "Direct Construction Costs" refers to the actual cost to build the project.

5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure impacts are mitigated. This phase includes expenditures for "Env Monitoring – Staff" and "Env Monitoring – Consultant". "Env Monitoring – Staff" refers to the cost for CDA staff time while "Env Monitoring – Consultant" includes all other costs. "Plant Establishment – Staff" and "Plant Establishment – Consultant": Typically done at the end of construction, environmental improvement projects include re-establishment of vegetation that may have been removed or damaged during the construction phase. This step includes all costs related to planting, watering and maintaining the new or disturbed vegetation until it becomes established. "Plant Establishment – Staff" refers to the cost for CDA staff time while "Plant Establishment – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date coincides with the date funding becomes available through the award of grant funds.

The CDA is responsible for operating the Placerville and Georgetown Airports, which includes developing and implementing the ACIP for both airports. The Federal Aviation Administration (FAA) reviews, authorizes and funds the ACIPs. Thus, the ACIPs are developed in partnership with the FAA. The FAA funds 90% of most ACIP project costs. A 5-Year ACIP for Georgetown and Placerville Airports was recently completed in cooperation with the FAA, entitling the CDA to pursue FAA grants for projects occurring during 2016-2021. The State has provided matching funds for Airport projects in past years. However, State matching funds have not been programmed in the 2016 ACIP, as these funds have become unreliable. State funding will continue to be pursued.

ACIP projects are prioritized based on several criteria including safety, security, and capacity.

Annual Updating Process

All CIP programs are reviewed and updated annually, including revenue estimates, project costs and schedules. In the case of the ACIP, the CDA drafts a proposed list of projects and submits it to the FAA in December for discussion. The FAA reviews the Airport Layout Plan (ALP) for compliance with aviation design standards, and proposes revisions to the ALP and ACIP. The FAA consults with the CDA in project ranking and funding eligibility. The FAA circulates the draft ACIP for potential funding to California Transportation Commission, Federal and State aviation divisions.

In January, the CDA updates the ACIP and submits it to the FAA. The FAA provides direction to staff regarding which projects it will fund, and requests the CDA submit grant applications in March so that projects can be initiated in June/July. Projects may be authorized for planning, design, and/or construction work.

Simultaneously, the CDA presents its CIP recommendations to the Board of Supervisors for discussion and adoption. The budget for next year's potential projects is then updated, based on Federal and state budget constraints. Figure 1-8 illustrates the ACIP Annual Updating Process.

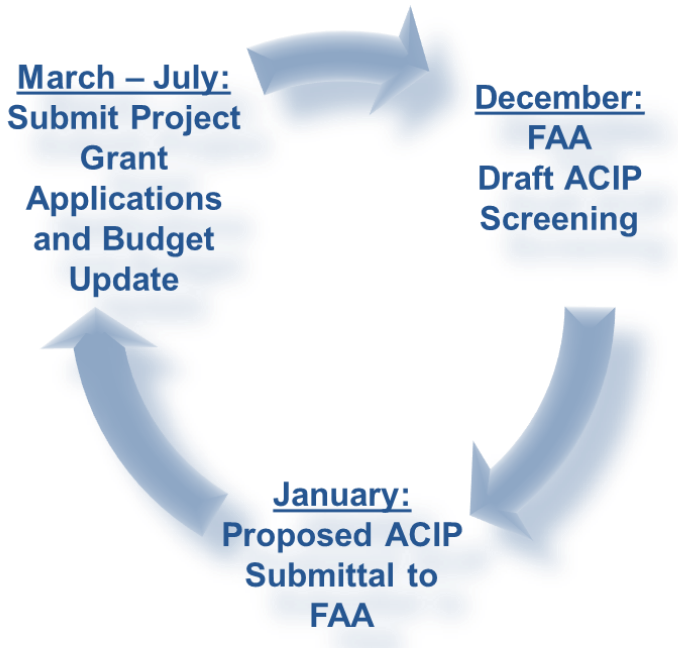


Figure 1-8: ACIP Annual Updating Process

Airport CIP Projects

The CDA is currently working with its airport consultant on an update to the Airport Layout Plan with Program Narrative Report for the Georgetown Airport. The 5-year ACIP for the Placerville Airport recently completed in cooperation with the FAA includes a similar update currently anticipated for FY 2016/17. Each Updated Airport Layout Plan will include updated plans to provide appropriate criteria and guidelines for future airport projects and will generate an updated project list.

The CDA maintains an interactive map depicting the location of projects in the ACIP, located at http://gem.edcgov.us/cip/. The CDA proposes to work on several projects, subject to FAA grant funding, as shown in Table 1-3 in Fiscal Year (FY) 2016/17.

Table 1-3: 2016 ACIP Projects

Airport	Proposed Const. Year	Description	Total Project Cost		FAA Grants		Local Funds	
			2015 CIP	2016 CIP	2015 CIP	2016 CIP	2015 CIP	2016 CIP
Placerville	2016/17	Taxiway Edge Lights (93130)	$416,000	$467,000	$374,000	$418,000	$42,000	$49,000
Placerville	N/A	Airport Layout Plan Update and Obstruction Survey (93132)	$150,000	$210,000	$135,000	$189,000	$15,000	$21,000
Georgetown	N/A	Obstruction Survey (93503)	$90,000	$115,000	$81,000	$103,000	$9,000	$12,000
Georgetown	2017/18	Crack Seal, Joint Seal & Mark Runway, Taxiways, Aprons, & Tee Hangar Taxilanes; Change Runway End ID (93527)	$490,000	$523,000	$441,000	$468,000	$49,000	$55,000
		Totals	**$1,146,000**	**$1,315,000**	**$1,031,000**	**$1,178,000**	**$115,000**	**$137,000**

Individual Projects - Grouped by Project Type

Individual Project Summaries are provided in Section 8.3 for each segment of the ACIP, grouped by airport, and provide detailed descriptions, timing, cost and revenue information. Projects are listed in alphabetical order within each segment of the ACIP. The "Revenues" section of each project summary includes anticipated grants from the FAA along with matching funds from ACO or airport operations (i.e., "Enterprise funds"). The "Expenditures" section of each project summary includes the various types of costs planned to be incurred for each project (i.e., Design and Construction).

The "Project Schedule" section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for "Planning/Env – Staff" and "Planning/Env – Consultant". Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. "Planning/Env – Staff" refers to the cost for CDA staff time, while "Planning/Env – Consultant" includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

2. **Design:** This phase includes expenditures for "Design – Staff" and "Design – Consultant". The Design phase includes all costs related to developing the project

plans, specifications and engineer's cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. "Design – Staff" refers to the cost for CDA staff time, while "Design – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

3. **Right of Way:** This phase includes expenditures for "Right of Way – Staff", "Right of Way – Acquisition", and "Right of Way – Consultant". The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. "Right of Way – Staff" refers to the cost for CDA staff time; "Right of Way – Acquisition" refers to the cost of land; and "Right of Way – Consultant" includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

4. **Construction:** This phase includes expenditures for "Construction Mgmt – Staff", "Construction Mgmt – Consultant" and "Direct Construction Costs". This Construction phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. "Construction Mgmt – Staff" refers to the cost for Division staff time, while "Construction Mgmt – Consultant" includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) "Direct Construction Costs" refers to the actual cost to build the project.

5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for "Env Monitoring – Staff" and "Env Monitoring – Consultant". "Env Monitoring – Staff" refers to the cost for CDA staff time while "Env Monitoring – Consultant" includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date is the date that coincides with the project engineer's original budget.

Interim Transportation Facilities Improvement Program Overview

The CDA is responsible for constructing, repairing and maintaining County Transportation Division facilities. The Transportation Facilities Improvement Program (TFIP) includes capital maintenance projects, which are prioritized based on several criteria, including health and safety, ongoing maintenance costs and state or Federal requirements.

The TFIP section of the 2016 Interim CIP Book includes one Facilities project – the Headington Wash Rack Facility Project (CIP #81134), formerly named Headington Wash Rack & Sewer Connection Project. The project is designed to meet requirements of the State Water Resource Control Board and Regional Water Quality Control Board, and includes the installation of an automated water treatment reclamation/recycling wash rack system at the Headington Corporation Yard. The improvements include construction of a covered vehicle wash building, electrical power supply, automated treatment recycle system (with treatment equipment and holding tanks), rainwater storage tanks, plumbing of water systems, and disconnecting from the existing sewer line. The purpose of this project is to replace and improve the existing uncovered wash rack for County fleet vehicles, thereby eliminating runoff and sewer discharges, decreasing use of domestic water for equipment maintenance and greatly improving water quality and environmental impacts.

Significant operational cost savings could be realized at the facility due to the elimination of sewer discharges (and corresponding sewer fees), and use of automated wash features (less labor and wash time. The CDA maintains an interactive map depicting the location of projects in the TFIP program, located at http://gem.edcgov.us/cip/.

Individual Projects - Grouped by Project Type

A Project Summary is provided in Section 4.4 for the TFIP project, which provides a detailed description, schedule, cost and revenue information. The “Revenues” section of the project summary includes anticipated revenue for the project. The “Expenditures” section of the project summary includes the various types of costs planned to be incurred for each project (i.e., Panning/Environmental, Design, Construction and Environmental Monitoring).

The “Project Schedule” section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

2. **Design:** This phase includes expenditures for “Design – Staff” and “Design – Consultant”. The Design phase includes all costs related to developing the project plans, specifications and engineer’s cost estimates to make a project bid-ready. This phase usually begins after the environmental document has been certified by the Board, and can be completed in parallel with the Right of Way acquisition phase. “Design – Staff” refers to the cost for CDA staff time, while “Design – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

3. **Right of Way:** This phase includes expenditures for “Right of Way – Staff”, “Right of Way – Acquisition”, and “Right of Way – Consultant”. The Right of Way phase includes all costs related to determining what property or easements are needed for a project, then pursuing acquisition. This phase begins after the environmental document has been certified by the Board, and can be completed in parallel with the Design phase. “Right of Way – Staff” refers to the cost for CDA staff time; “Right of Way – Acquisition” refers to the cost of land; and “Right of Way – Consultant” includes all other costs (e.g., staff time from non- CDA departments, external consultants, etc.)

4. **Construction:** This phase includes expenditures for “Construction Mgmt – Staff”, “Construction Mgmt – Consultant” and “Direct Construction Costs”. This phase includes all costs related to managing, overseeing, and inspecting a project once the project has been bid and awarded to an external firm for construction. “Construction Mgmt – Staff” refers to the cost for Division staff time, while “Construction Mgmt – Consultant” includes all other labor costs (e.g., staff time from non- CDA departments, external consultants, etc.) “Direct Construction Costs” refers to the actual cost to build the project.

5. **Environmental Monitoring:** This phase includes the costs associated with monitoring the environment affected by the project to ensure any impacts are mitigated. The environmental monitoring phase includes expenditures for “Env Monitoring – Staff” and “Env Monitoring – Consultant”. “Env Monitoring – Staff” refers to the cost for CDA staff time while “Env Monitoring – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

The project initiation date is the date that coincides with the project engineer's original budget.

Interim Capital Overlay and Rehabilitation Program Overview

Capital Overlay and Rehabilitation Program (CORP) projects are roadway rehabilitation projects which require an improvement to the roadway structural integrity. CORP projects are very visible improvements that have positive impacts in El Dorado County. They are an efficient use of one time revenues, with lower planning, environmental, and design costs than other transportation projects (e.g., bridges, road widening projects, etc.). The Community Development Agency, Transportation Division (Transportation) is able to get overlay projects on the ground very quickly. AC overlays are considered to be capital projects if they are one-inch (1") or more in thickness. Overlays typically have a long useful life (15+ years), and permanently increase the roadway structure.

Transportation plans to overlay and rehabilitate as many of the roads as possible on its project priority list given available funding. Past asphalt concrete overlay projects have been funded by Regional Surface Transportation Program Exchange Funds, Proposition 1B, American Recovery and Reinvestment Act funds, and contributions from the General Fund and Tribal Funds. The Road Fund is generally used for maintenance work (e.g., brushing, ditching, chip seal, etc.) and not for asphalt concrete overlays.

Pavement Management Program (PMP)

Information provided by the Pavement Management Program (PMP) drives the Road Maintenance Program (RMP) and CORP programs. The PMP is a tool used to assist in monitoring the condition of all paved roads within the County. It maintains a history of surface treatment and overlay work performed on the roads. The PMP also assists in funding procurement by demonstrating use of proper maintenance strategies with existing funds.

The PMP allows staff to evaluate and monitor the condition of pavement to enable Transportation to use its limited resources in the most efficient manner possible. Ideally, each road should be inspected every other or every third year. Surface treatment and overlay data is entered upon completion of work, and used to prioritize maintenance and overlay work plans.

The PMP inspection process has two components.

In the field:

- For every 1,000 feet of roadway, 100 feet are inspected on foot.
- Each inspection looks for 19 different potential deficiencies.
- Each deficiency encountered is measured and evaluated for severity.
- Inspectors must be trained to identify deficiencies and properly evaluate severity.
- Inspection is quantitative and statistics-based.

In the office:

- Data is entered into the StreetSaver program.
- Pavement Condition Index (PCI) is calculated (on a scale of 0 to 100) and

updated.

- Roads are prioritized for maintenance or overlay work.

The PMP will enable staff to focus on common-sense preventative maintenance, which will maximize the useful life of the County's roadway infrastructure.

CORP Annual Updating Process

Transportation prioritizes CORP projects based on several criteria, including pavement condition, traffic volume, traffic circulation and funding. Between October and February, staff performs pavement inspections (Tahoe inspections are performed prior to snow season). Upon completion of pavement inspections, the PMP database is updated. Between February and April, staff uses PMP data to set priorities for surface treatment and to determine which CORP projects to include in the CIP. During the period from April to October, staff or contractors perform overlay work.

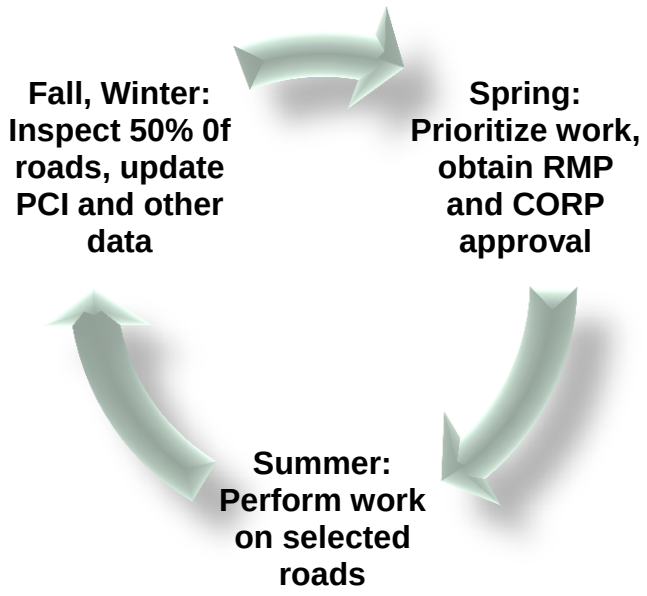


Figure 1-7: CORP Annual Updating Process

CORP Projects

As part of the $1,250,000 Local Funds-Tribe annual funding designated in FY 2015/16, Transportation will overlay Pleasant Valley Road between Lake Oaks Drive and Solstice Circle and Missouri Flat Road from State Route 49 to 700 feet north of State Route 49 during the 2016 construction season. The Patterson Drive and Missouri Flat Road Overlay project is scheduled for FY 2016/17, as shown in Table 1-4. Transportation maintains a list of potential CORP projects, which will be added to the CIP as funding becomes available.

Table 1-4: Current Year CORP Projects

Year Construction to Begin	Description	Authorized Funding	Estimated Cost
2015/16	Patterson Drive and Missouri Flat Road Overlay	Local Funds – Tribe	$1,250,000
		Total	**$1,250,000**

Transportation's strategy has been to fund CORP projects primarily with external funding. Table 1-5, the Infrastructure Investment Options List, includes projects staff has prioritized in no particular order. Projects on this list could be constructed if the Board wishes to approve additional General Fund revenue, continue allocating some Tribe revenue, or redirect revenue currently recommended for West Slope Road/Bridge Projects.

Table 1-5: CORP Infrastructure Options List

Project	Start	End	Length	ADT	PCI
Country Club Dr.	Cambridge Rd.	Cameron Park Dr.	8,607	2,752 - 3,970	53
El Dorado Hills Blvd.	Wilson Blvd.	Green Valley Rd.	16,181	4,974 - 22,225	56
Elks Club Dr.	Pioneer Tr.	U.S. Hwy. 50	4,277	2,099	4
Greenwood Rd.	Marshall Rd.	State Hwy. 193	26,400	1,679	75
Marshall Rd.	State Hwy. 49	Garden Valley Rd.	25,661	3,367	30
Pleasant Valley Rd.	Mother Lode Dr.	State Hwy. 49	6,706	9,292	59
Sawmill Rd.	U.S. Hwy. 50	Lake Tahoe Blvd.	9,715	1,495	24
Sly Park Rd.	Mt. Aukum Rd.	Sierra Springs Dr.	25,399	2,971	46
Sly Park Rd.	Sierra Springs Dr.	Mormon Emigrant Tr.	9,766	2,059	46
South Shingle Rd.	Latrobe Rd.	U.S. Hwy 50	47,203	1,044 - 9,751	42

Individual Projects - Grouped by Project Type

Individual Project Summaries are provided for each segment of the CORP, and provide detailed descriptions, timing, cost and revenue information. Projects are listed in alphabetical order within each segment of the CORP. The "Revenues" section of each project summary lists the various funding sources for each project. The "Expenditures" section of each project summary includes the various types of costs expected for each project (i.e., Design and Construction.) CORP projects do not normally have Planning/Environmental, Right of Way or Environmental Monitoring costs.

The “Project Schedule” section provides an estimate of the funding year each phase is expected to occur. This section is divided into the following phases:

1. **Planning/Environmental:** This phase includes expenditures for “Planning/Env – Staff” and “Planning/Env – Consultant”. Typically the first step in the project delivery process, the Planning/Environmental phase includes all costs related to planning the project, including the preliminary design and research required to complete the environmental analysis. “Planning/Env – Staff” refers to the cost for CDA staff time, while “Planning/Env – Consultant” includes all other costs (e.g., staff time from non-CDA departments, external consultants who specialize in environmental analysis, rental of monitoring equipment, etc.)

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The project initiation date is the date that coincides with the project engineer's original budget.